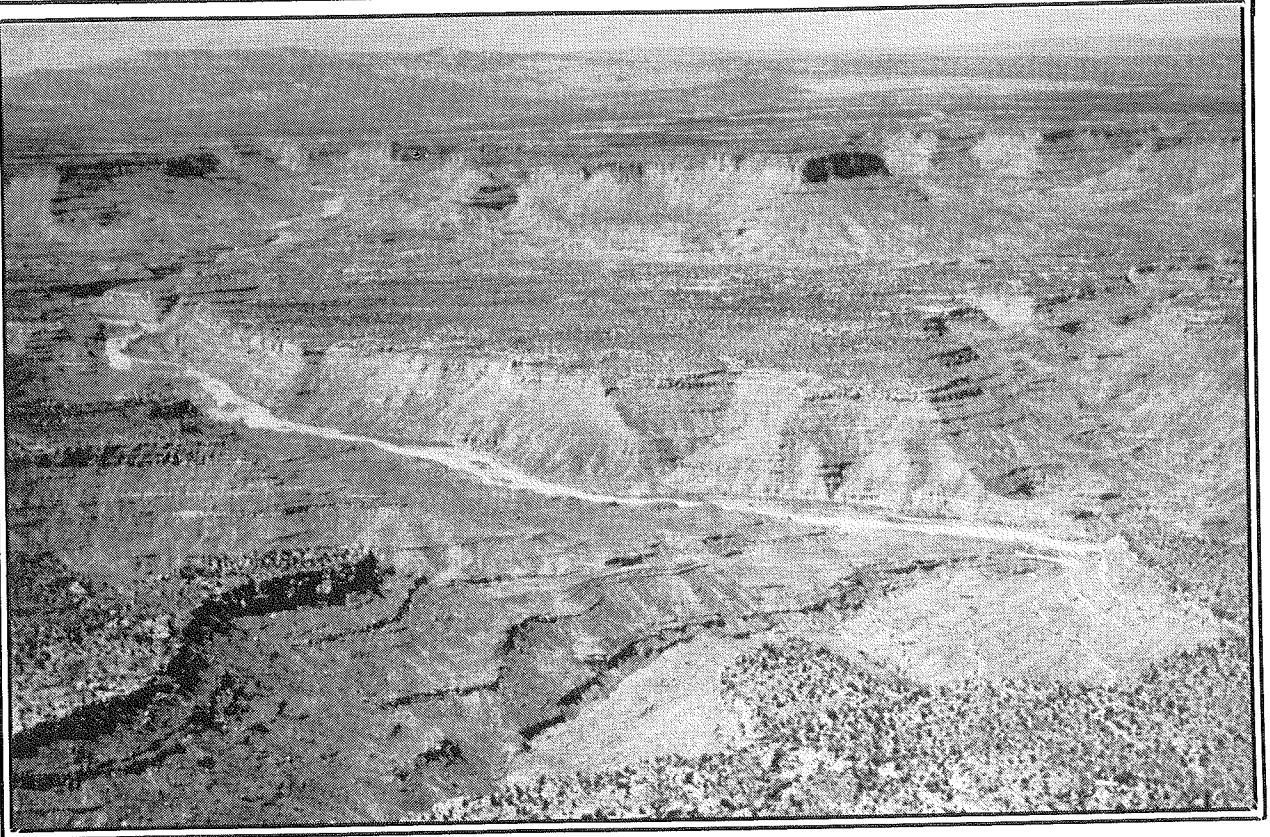


Wahweap
WSA



WAHWEAP WSA
R. 1 E. R. 2 E.

T. 39 S.

T. 40 S.

T. 41 S.

T. 42 S.

Wahweap WSA
Proposal
UT-040-248

SCALE IN KILOMETERS
0 1 2

ELEVATION EXPRESSED IN METERS

- | | |
|------|---|
| NONE | RECOMMENDED FOR WILDERNESS |
| | RECOMMENDED FOR NON-WILDERNESS |
| NONE | LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS |
| NONE | SPLIT ESTATE LAND WITHIN WSA BOUNDARY |
| | STATE LAND WITHIN WSA BOUNDARY |
| NONE | PRIVATE LAND WITHIN WSA BOUNDARY |

WAHWEAP WILDERNESS STUDY AREA

1. THE STUDY AREA: 134,400 acres

The Wahweap Wilderness Study Area (WSA) (UT-040-248) is in eastern Kane County, about 40 miles east of Kanab, Utah (population 2,148). The study area is irregularly shaped, and is approximately 20 miles long from north to south and 15 miles wide from east to west. A road separates the WSA from the Paria-Hackberry/Paria-Hackberry 202 WSA (UT-040-247), to the west. The northeastern portion of the WSA is adjacent to the Burning Hills WSA (UT-040-079). Most of the WSA boundary is along roads (see Map). A large portion of the boundary in areas such as Fourmile Bench and Reynolds Point is along the roads and disturbed areas from exploration associated with the Kaiparowits Coal Project.

In the northwestern portion of the WSA, the boundary avoids a large chained area on Horse Flat. Several cherry-stemmed roads and exclusions containing non-Federal lands and public lands with few or no wilderness characteristics penetrate the WSA. The WSA contains 134,400 acres of public land administered by the Bureau of Land Management (BLM). Sixteen State sections (10,361 acres) are inheld in the WSA (see Table 1).

The WSA is part of the Kaiparowits Plateau, in the Canyonlands Section of the Colorado Plateau Physiographic Province. The surface of the WSA slopes generally northward, and consists of benches and south-facing cliffs.

TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	134,400
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	10,361
Total	144,761
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	0
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	0
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	134,400
Split-Estate	0
Total BLM land not recommended for wilderness	134,400
In-holdings (State, Private)	10,361

Source: BLM File Data

WAHWEAP WILDERNESS STUDY AREA

The study area is like a giant staircase, which rises from an elevation of 4,040 feet on Wahweap Creek at the southern edge of the WSA, to more than 6,500 feet along high points on The Cockscomb, at the northwestern edge of the WSA. There are no perennial streams in the WSA. Vegetation is predominantly pinyon-juniper and desert shrubs, but there are small areas of sagebrush and grass.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Three alternatives were analyzed in the EIS: a no wilderness (no action) alternative which is the recommendation in this report, an all wilderness alternative, and a partial wilderness alternative of 70,380 acres.

2. RECOMMENDATION AND RATIONALE:

0 acres

(recommended for wilderness)

134,400 acres

(recommended for nonwilderness)

The recommendation for this WSA is to release the entire area for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

All of the study area is in a natural state, but only about 10 percent of the WSA has outstanding opportunities for solitude. About 17 percent of the WSA has high scenic values, in six scattered locations. Opportunities for primitive recreation are not outstanding. About 1,000 acres of comparatively old pinyon and juniper trees and 11,700 acres of features with geologic interest that are found in the WSA are not considered to be of national or regional significance.

In contrast with the relatively low wilderness values, the WSA has comparatively high potential for oil and gas development in the long-term future. The WSA

is in the southern part of the Kaiparowits Coal Field and within the Kaiparowits Known Recoverable Coal Resource Area. About 12 percent of the WSA is currently leased for coal, with pre-existing rights. Extraction of coal from the Kaiparowits Coal Field is not expected in the short term, but the most likely location for mining would be on the existing leases, which may include those in the Wahweap WSA.

Because of the WSA's large size, BLM reviewed several partial wilderness alternatives that could preserve those portions of the WSA with the greatest wilderness attributes and avoid conflicts with other uses. None of these were found to be suitable for wilderness management. The recommendation for no wilderness designation in the Wahweap WSA is based on overall low wilderness qualities and long-term future potential for energy mineral extraction.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. More than 99 percent of the WSA meets the criteria for naturalness. Imprints of human activity evident in the WSA are approximately 40 miles of ways, including ways created during exploration for coal on and below Reynolds Point, Fourmile Bench, and John Henry Bench; short fences in Wahweap and Tommy Smith Creeks; impoundments on Jack Riggs Bench and near Chimney Rock; and ways and fences in Coyote Creek. These imprints combined involve less than 1 percent (46 acres) of the total WSA area. However, the naturalness attributes of the WSA are tempered by the wide distribution of these imprints of man. There are no large blocks of land totally devoid of human disturbance.

Since BLM defined the WSA, approximately 1 acre of the area has been disturbed. This disturbance resulted from (1) non-mechanical, nonimpairing construction of

WAHWEAP WILDERNESS STUDY AREA

a 500-foot livestock gap fence on Jack Riggs Bench in 1984; (2) nonmechanical, nonimpairing redevelopment of a spring also on Jack Riggs Bench in 1984; and (3) an unauthorized alabaster mining operation on the west side of The Gut, just inside the WSA, in 1985. The required reclamation was completed in 1988. Success of reclamation of the mining will result in nonimpairment and the entire WSA meets the Wilderness Act criteria for naturalness.

B. Solitude

In all, about 10 percent (13,440 acres) of the WSA meets the outstanding opportunities for solitude criterion for areas under wilderness review. Benches, such as Fourmile Bench, Jack Riggs Bench, and Horse Flat, do not provide opportunities for solitude because they lack adequate screening. The WSA is not compact in configuration, and numerous cherry-stemmed intrusions penetrate the unit and lessen the opportunities for solitude. Approximately 120,960 acres do not meet the standard for outstanding opportunities for solitude.

The dendritic upper reaches of drainages such as Wahweap and Coyote Creeks, John Henry Canyon, Drip Tank Canyon, and Wesses Canyon provide screening. In the lower benches and canyons in the southern portion of the WSA, hoodoos, balanced rocks, and the sheer walls of the canyons also provide screening. Coves are eroded into a group of narrow canyons in this area.

C. Primitive and Unconfined Recreation

Opportunities for primitive and unconfined recreation are not outstanding within the WSA. The unit does not contain features or conditions that would provide excellent opportunities for recreation activities or for a single activity with outstanding quality.

D. Special Features

The Fourmile Bench Old Tree Area is a unique area of 1,400-year old pinyon and juniper trees. Prior to identification of the area as a WSA, it was generally thought that the area's trees did not exceed 600 to 800 years of age. Protection for further scientific study has

been considered for the area. The scientific values extend over approximately 1,000 acres of the WSA.

Some specific locations in the WSA provide exceptional scenic geologic features. The lower portions of Wahweap Creek and Coyote Creek have exposed the Dakota Sandstone Formation. The sandstone is most evident in the Coyote Creek drainage in the White Rocks and the Rimrocks. Big White Rock Canyon, Little White Rock Canyon, Chimney Rock Canyon, and Chimney Rock are scenic features. The red Entrada Formation is also exposed in this area and lends visual contrast to the white Dakota Formation. Within this area are sheer-walled canyons, hoodoos, balanced rocks, and coves with narrow canyons. BLM has identified approximately 7,007 acres of scenic features in this portion of the WSA.

The East Kaibab monocline, or The Cockscomb, extends along the western boundary of the WSA. The monocline contains a feature known as Cads Crotch which is a trough on the crest of the structure. Approximately 4,728 acres of scenic features are present in the Cads Crotch portion of the monocline.

The upper portions of the Coyote Creek drainage, the inner canyon of the middle segment of the Wahweap Creek drainage including the West Fork of Ty Hatch Canyon, and the upper reaches of the Wahweap drainage are also scenic. The upper portion of the Wahweap system includes Tommy Smith Creek, Fourmile, Tommy, Wahweap, and Long Canyons. In contrast to the Warm Creek drainage canyons in the WSA, the Wahweap Creek drainage canyons exhibit some riparian vegetation such as cottonwood groves. The vegetation contributes to the landscape qualities of the canyon systems. Scenic features in these portions of the WSA are found in approximately 10,546 acres.

Peregrine falcons and bald eagles, listed as endangered, may occasionally visit the WSA. Cougar, which is a wildlife species associated with wilderness, is found in the WSA. Nine other animal species and six plant species that are considered sensitive may inhabit the WSA. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife

WAHWEAP WILDERNESS STUDY AREA

Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in the NWPS.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Colorado Plateau Province/Ecoregion. The PNV in the WSA is juniper-pinyon woodland (100,000 acres) and saltbush-greasewood (34,400 acres). The PNV in the WSA is represented in the NWPS nationally and in Utah and in other BLM study areas both in and outside of Utah. This information is summarized in Table 2 from data compiled in December 1989.

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,044,005
Saltbush-Greasewood	1	20,000	17	359,603
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,606,198
Saltbush-Greasewood	1	20,000	17	359,603

Source: BLM File Data.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is not within a 5-hour drive of any major population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

The Wahweap WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS. As of January 1987, the NWPS included 64 areas comprising 2,834,115 acres in Utah and Arizona.

Eight designated wilderness areas are within 100 miles of the WSA. In a clock-

wise direction beginning to the north, are the 26,000-acre Box-Death Hollow Wilderness (Forest Service [FS]), the 45,000-acre Dark Canyon Wilderness (FS), the 112,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 6,860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 40,600-acre Saddle Mountain Wilderness (FS), and the 7,000-acre Ashdown Gorge Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

BLM believes that the study area could be managed as wilderness in the short-term future. There are 1,225 acres of post-FLPMA oil and gas leases in the

WAHWEAP WILDERNESS STUDY AREA

WSA, but these leases are subject to nonimpairment of wilderness values and will likely expire and not be renewed if the area is designated as wilderness. There are 640 acres of mining claims, but the probability of development of locatable minerals also is low. There are 12 coal leases covering 17,628 acres of the WSA. These leases could be legally developed following wilderness designation, rendering the northeast portion of the WSA unmanageable as wilderness. However, these leases may expire before diligence requirements are met, and would not be renewed if the area is designated as wilderness. In addition to the influence of existing cherry-stemmed roads, the presence of 16 sections of in-held State lands distributed throughout the WSA further complicates the question of manageability. Of the 10,361 acres of State land in the WSA, 9,037 are under leases for oil, gas, hydrocarbons, and grazing.

Although grazing is the only activity occurring on these lands at present, the known coal values of the region along with some potential for oil and gas may lead to proposals that would require provision of many additional access roads through the wilderness in the long-term future.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) assessed the mineral resource potential of 70,380 acres in the WSA, and prepared a mineral assessment report (USGS Bulletin 1748-A, Henry Bell III, et al., 1990). The report indicates that no identified resources of metallic or nonmetallic minerals occur, but about 350,000 tons of identified subbituminous coal resources are estimated to be in the WSA. The mineral resource potential for all metals, including gold and uranium, is low. Gravel deposits have been mined nearby, and the mineral resource potential is high for additional deposits of sand and gravel in the southern end of the WSA. A moderate energy resource potential exists for coal. The resource potential is moderate for oil and gas, and is low for geothermal energy.

Impacts on Resources

The comparative impact table (Table 3) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

No loss of local employment or income would occur. Federal and State revenues would not be reduced. Economic opportunities could be realized through mineral and energy resource exploration and eventual development of coal in the long term. There would be major beneficial and adverse affects in Kane County.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 115 inputs specifically addressing this WSA were received from 146 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 104 commenters supported wilderness designation for part or all of the WSA, while 35 commenters were opposed. Seven commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on special features in the WSA and unspecified wilderness values. The majority of those commenting in favor of wilderness were from outside of Utah. Of particular concern was the need to protect wilderness values.

WAHWEAP WILDERNESS STUDY AREA

Those opposing wilderness were concerned that wilderness would preclude mineral exploration and development. The majority of those opposed were from rural Utah, but a significant proportion were from other states.

Two Federal agencies, the National Park Service (NPS) and the USBM commented on the Draft EIS. The NPS did not take a position regarding designation or non-designation, but did recommend that the EIS identify The Jewel Box along The Cockscomb as a proposed National Natural Landmark (NNL). The USBM commented that the BLM's Final EIS should include the findings of the USGS and USBM mineral investigations and those findings would be available in November 1988. These findings have been incorporated into the EIS and study report.

No comment letters were received on the Final EIS.

There are 16 sections (10,361 acres) of State land in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of this WSA. The State considers the WSA to have moderate wilderness values and conflicts. In its evaluation of the partial wilderness alternative, the State suggested that further boundary adjustments to exclude all mesa tops and the upper reaches of Fourmile Canyon would mitigate much of the livestock and coal resource conflicts. The State suggested that the juniper tree area on Fourmile Bench be designated as a Research Natural Area (RNA) and noted that the bottom of Cottonwood Creek must be reserved for the alignment of an improved highway between US Highway 89 and Cannonville.

The Kane County Commission is opposed to wilderness designation of the Wahweap WSA and has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. The Kane County Master Plan rejects wilderness as an exclusionary form of recreation that cannot be used by the average visitor. In commenting on the Draft EIS the County noted that the Wahweap WSA is located on a very important, known coal

resource and that it would be unwise to create a conflict with such a known resource. The County also stated that the area should be open to improvement of livestock grazing. In their opinion the area lacks outstanding opportunities for solitude and primitive recreation. The County believes that scientific and scenic areas in the WSA can be protected under current BLM directives.

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Table 3
Comparative Summary of Impacts by Alternative

Issue Topic	Alternatives	
	Recommendation No Action/No Wilderness	All Wilderness (134,400 Acres)
Impacts on Wilderness Values	<p>Wilderness values would not be protected by wilderness designation, and loss would occur as intrusions increase. In the short term, naturalness and opportunities for solitude and primitive recreation would be directly lost on 7,191 acres of the WSA because of vegetation treatments, rangeland projects, wildlife water projects, and development of access roads to State in-holdings and indirectly reduced in quality on up to an additional 33,600 acres. Special features would not be significantly affected. Vehicular use of 40 miles of existing ways and future roads would occasionally detract from opportunities for solitude and primitive recreation in the WSA. In the long term, coal development would directly eliminate wilderness values on 40 acres of the WSA, and would indirectly reduce wilderness values on up to 13,440 acres.</p>	<p>Wilderness designation would preserve overall the wilderness values in the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 46 acres of the WSA because of rangeland projects, wildlife water projects, and development of access roads to State in-holdings. Special features, including Class A scenery and other scenic features, geologic features, special status species, wildlife associated with wilderness and special vegetation areas would be preserved overall.</p>
		<p>Partial Wilderness (70,380 Acres)</p> <p>Wilderness values would be preserved overall in the designated portion which is approximately 52 percent of the WSA. In the short term, naturalness and opportunities for solitude and primitive recreation would be directly lost on 3,049 acres because of vegetation treatments, rangeland projects, wildlife water projects, and development of access roads to State in-holdings, and would be indirectly reduced in quality on up to 16,128 acres. Most of the impact would be in the non-designated area. Special features would be preserved overall in the designated area. Although 25 percent of the scenic values and the old pin-yon-juniper woodland stand on Four Mile Bench would be in the non-designated area, these values would most likely not be disturbed. Use of 30 miles of vehicular ways in the non-designated portion would detract from opportunities for solitude and primitive recreation in the WSA. Coal development over the long term would directly disturb 40 acres of the WSA, and an indirect reduction in the quality of wilderness values would occur on up to 13,440 acres of the WSA.</p>

WAHWEAP WSA

Table 3 (Continued)
Comparative Summary of Impacts by Alternative

Issue Topic	Recommendation No Action/No Wilderness	Alternatives	
		All Wilderness (134,400 Acres)	Partial Wilderness (70,380 Acres)
Impacts on Vegetation	Special status plant species would not be significantly affected. The 7,191 acres of projected surface disturbance would alter only about 7.3 percent of the pinyon-juniper woodland in the WSA; therefore, there would not be significant changes in the vegetation types in the WSA.	Implementation of the All Wilderness Alternative would not significantly affect the vegetation resource in the WSA. Vegetation types and special status plant species would be protected because potential disturbance would be reduced to 46 acres.	Special status plant species would not be significantly affected. The 3,089 acres of projected surface disturbance would affect less than 3 percent of the vegetation in the WSA.
Impacts on Mineral and Energy Exploration and Development	There would be no adverse impacts on mineral and energy development with this alternative because minerals could be leased, claimed, and developed as at present.	Wilderness designation would preclude exploration and development of about 500 million tons of recoverable coal. Loss of exploration and development opportunities for other mineral and energy resources would not be significant, because the probability of development is low even if the WSA is not designated wilderness.	Implementation of the Partial Wilderness Alternative would not prevent the recovery of significant amounts of leasable or locatable or salable minerals. The majority of the significant coal resource would be located in the nondesignated portion of the WSA and could eventually be developed.
Impacts on Wildlife Habitat and Populations	Wildlife habitat and populations including special status animal species would not be significantly affected. Overall, implementation of the water and vegetation treatment projects would benefit wildlife by providing additional water, forage, and ecotones. Overall, less than 6 percent of the wildlife habitat in the WSA would be disturbed.	Wilderness designation would preclude 7,100 acres of vegetation treatments and resulting habitat improvement would be foregone. All species would benefit from additional opportunities for solitude. Less than 1 percent of the wildlife habitat in the WSA would be disturbed.	Partial wilderness designation would preclude 4,100 acres of vegetation treatments and resulting habitat improvement would be foregone. All species would be provided with additional opportunities for solitude on 52 percent of the WSA. Less than 3 percent of the wildlife habitat in the WSA would be disturbed.

WAHWEAP WSA

Table 3 Continued)
Comparative Summary of Impacts by Alternative

Issue Topic	Alternatives		
	Recommendation No Action/No Wilderness	All Wilderness (134,400 Acres)	Partial Wilderness (70,380 Acres)
Impacts on Livestock Management	<p>Present livestock management practices would continue. Permittees would benefit from 7,100 acres of vegetation treatments, which could provide an increase of 1,160 AUMs and improve livestock distribution.</p>	<p>Restrictions on motorized use of 40 miles of way would increase management costs and inconvenience to 42 permittees. The opportunity for an increase of 1,160 AUMs and better livestock distribution through vegetation treatments and construction of four reservoirs would be foregone.</p>	<p>Implementation of this alternative would not result in a change in the level of livestock use but would cause a minor change in livestock supervision and management in the designated portion of the WSA. Restrictions on access to 10 miles of the 40 miles of ways in the WSA would cause slight inconvenience and increases in management costs to livestock permittees. The opportunity for an increase of 669 AUMs and better livestock distribution through vegetation treatments would be foregone.</p>
Impacts on Economic Conditions	<p>No loss of local employment or income would occur. Federal and State revenues would not be reduced. Economic opportunities could be realized through mineral and energy resource exploration and eventual development of coal in the long term. There would be major beneficial and adverse affects in Kane county.</p>	<p>Wilderness designation would not significantly affect present local or regional economic conditions. However, new leasing in the WSA would not be allowed; therefore, potential sales and revenues from leasable minerals (coal) would be foregone. Over the long term, coal development and associated beneficial and adverse economic impacts would not occur. This would significantly change future economic conditions in Kane County from what they would be without wilderness designation.</p>	<p>Over the short term, the Partial Wilderness Alternative would not affect local economic conditions. Impacts could occur in the long term as a result of projected coal development in the non-designated portion of the WSA. There would be major beneficial and adverse effects in Kane County.</p>